

Keeping tabs on **kegs** with **supply chain traceability**

REUSABLE PACKAGING MANAGEMENT

USE CASE

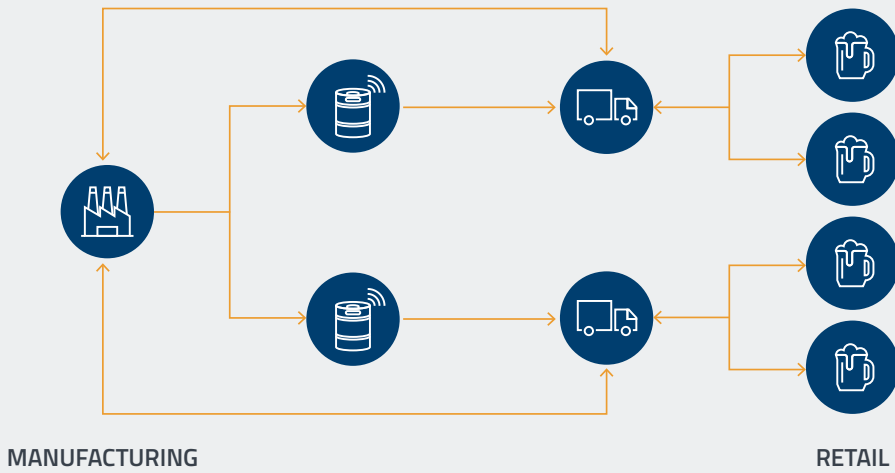
USE CASE FOR BEVERAGE MANUFACTURERS

- The world's top beverage manufacturers move large fleets of kegs around the world.
- Stainless steel kegs are expensive and require planning and regular maintenance.
- Kegs can be reused multiple times when the distributor returns empty kegs to the manufacturer to exchange for full ones, contributing to the "circular packaging" economy.
- Manufacturers want visibility over the entire fleet of kegs to optimize return rates, demand forecasting, inventory level and location, maintenance, and of course, to reduce costs and minimize losses.

CHALLENGES

- Achieving control and visibility over fleets is a daily challenge.
- Keg traceability is complex because of the high number and numerous locations of distributors.
- Competitors use similar kegs. Identifying which ones belong to which company is not always easy.
- Collection of the traceability data needs to be simple and automated.
- Internal transfers between distribution sites or retailers are frequent.
- Markings on the kegs need to be damage-proof and cost-effective.
- Solutions must be able to process kegs already in circulation.
- Manufacturers often need to add other monitoring metrics, such as the keg temperature along the supply chain.
- Reverse logistics is complicated in markets where beer is not pasteurized. The turnover rate is high and the window of operation is short.





THE SOLUTION

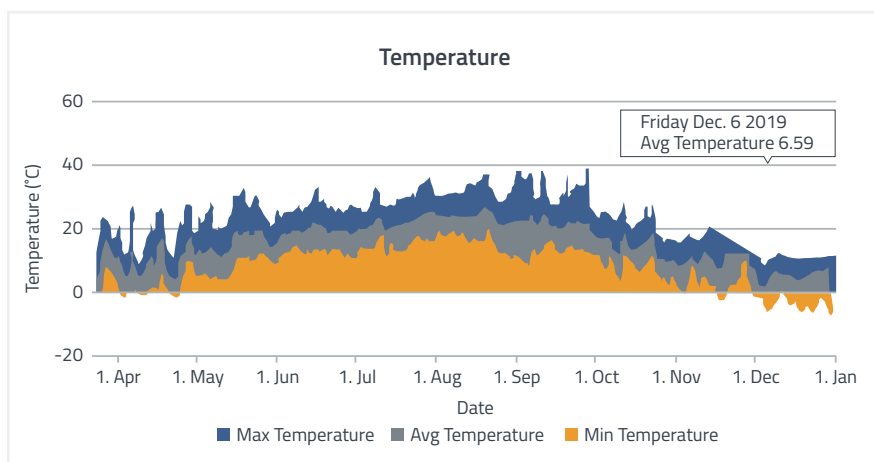
OPTEL's solution combines data capture devices on kegs to monitor location and shipment information with Internet of things (IoT) devices for supply chain visibility, along with mapping tools. Our technology stack includes hardware to capture accurate data in real time, as well as software for data empowerment and visualization of the packaging routes.

BASIC KEG TRACEABILITY

- Each keg is assigned a unique identifier (UID) with a smart tag, RFID, NCF, or UID printed directly on the asset.
- GPS location is recorded according to client requirements (number of checkpoints).
- The keg journey is monitored with the tracking device. Data can be captured automatically or manually.
- All unit events are recorded and uploaded to the cloud platform.
- Reporting and dashboards map the keg's journey, circulation times, return rates, location and inventory, and history (last location).
- Actionable data is now available for further keg authentication at every step of the supply chain, up to the consumer.
- The freshness of the contents and other metrics can also be measured.

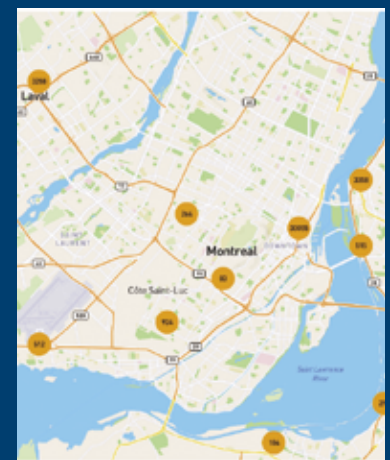
COLD-CHAIN MONITORING

- A sensor in the UID tag records keg temperature according to client requirements.



KEY BENEFITS

- Reduce asset losses and costs
- Optimize asset life cycle
- Optimize supply chain operations
- Improve inventory management
- Reduce waste and carbon emissions
- Reduce operational costs
- Benchmark supplier performance
- Gather valuable market intelligence



RETURN ON INVESTMENT

- Lower cost per trip
- Reduction of total cost of packaging ownership
- Fleet management cost saving
- More trips per item
- Supplier benchmarking

KEY INSIGHTS FOR THE MANUFACTURER

Achieving the next-generation supply chain requires strategic planning and involves every aspect of the company. Choose a supplier who has the expertise and a vision to support you in your digital supply chain transformation. Expertise in track-and-trace, blockchain, serialization, cloud, Industry 4.0 and the Internet of things is a must for a successful path to supply chain innovation.

CHEERS!

OPTEL'S INTELLIGENT SUPPLY CHAIN

The Reusable Packaging Management solution is a module of OPTEL's Intelligent Supply Chain (ISC), a powerful traceability platform. The ISC can digitize supply chain operations from raw materials to the end user, enabling real-time visibility throughout the product life cycle by capturing and empowering data at every step of the value chain. Multiple modules make up the ISC platform, helping businesses solve issues related to supply chain and operational efficiency, product safety and integrity, sustainability, brand protection and authentication, regulatory compliance and user engagement.

ABOUT OPTEL

- 30 years of industry-leading expertise in vision inspection, track-and-trace and traceability systems
- Complete end-to-end traceability platform from raw materials to the end user
- Expertise in the beverage industry
- 600 employees and facilities on four continents
- OPTEL is a Certified B Corporation

CONTACT US

To learn more about OPTEL's traceability solutions, contact us at optelgroup.com/contact/

NORTH AMERICA

OPTEL Canada — HEADQUARTERS
+1 418 688 0334

EUROPE

OPTEL Ireland
+353 61480965

ASIA

OPTEL India
+91 832 669 9600

SOUTH AMERICA

OPTEL Brazil
+55 19 3113 2570



HAVE QUESTIONS?

Chat with us: optelgroup.com



optelgroup.com

© 2021 by OPTEL GROUP.
All rights reserved.

